

In the Claims:

1. (previously presented) A method of manufacture of an article of jewelry comprising:
 - providing multiple wires composed of between approximately 50 to 60 wt percent Ni and between approximately 40 to 50 wt percent Ti;
 - intertwining said wires to form a braid;
 - forming said braid into a desired shape;
 - elevating the temperature of said braid above the austenite phase finish temperature to impart a memory shape to said braid;
 - cooling said braid to below the martensite phase finish temperature; and
 - assembling said braid with other components to form said article of jewelry.
2. (original) The method of claim 1, wherein said forming step is performed on a mandrel.
3. (previously presented) The method of claim 1, wherein said assembling step includes the steps of:
 - plastically deforming said braid to create plastic deformations in said braid; and
 - reheating said braid after said assembling step to above the austenite phase finish temperature in order to remove said plastic deformations.
4. (previously presented) The method of claim 1, further comprising the step of heat treating said braid to impart superelastic characteristics to said braid.

5. (canceled)

6. (previously presented) A method of manufacture of an article of jewelry comprising:
providing multiple wires composed of between approximately 50 to 60 wt percent Ni and
between approximately 40 to 50 wt percent Ti;
intertwining said wires to form a cable
forming said cable into a desired shape;
elevating the temperature of said cable above the austenite phase finish temperature to
impart a memory shape to said cable;
cooling said cable to below the martensite phase finish temperature; and
assembling said cable with other components to form said article of jewelry.

7. (currently amended) A method of manufacture of an article of jewelry comprising:
providing a wire composed of between approximately 50 to 60 wt percent Ni and
between approximately 40 to 50 wt percent Ti;
forming said wire into a desired shape;
elevating the temperature of said wire above the austenite phase finish temperature to
impart a memory shape to said wire;
cooling said wire to below the martensite phase finish temperature; and
assembling said wire with other components to form said article of jewelry by laser
welding said wire;
plastically deforming said wire to create plastic deformations in said wire; and

reheating said wire after said assembling step to above the austenite phase finish temperature in order to remove said plastic deformations.

8. (previously presented) A method of manufacture of an article of jewelry comprising:
providing a cast component composed of between approximately 50 to 60 wt percent Ni and between approximately 40 to 50 wt percent Ti in a shape having a gap to receive a gem stone;

elevating the temperature of said cast component above the austenite phase finish temperature to impart a memory shape to said cast component;

cooling said cast component to below the martensite phase finish temperature;

providing a gem stone larger than said gap;

assembling said cast component with other components to form said article of jewelry by widening said gap of said cast component and inserting said gem stone into said gap of said cast component; and

reheating said cast component after said inserting step to above the austenite phase finish temperature in order to secure said gem stone within said cast component.

9. (original) The method of claim 8, further comprising the steps of:

plastically deforming said cast component during said assembling step to create plastic deformations in said cast component; and

reheating said cast component after said assembling step to above the austenite phase finish temperature in order to remove said plastic deformations.

10. (original) The method of claim 8, further comprising the step of heat treating said cast component to impart superelastic characteristics to said cast component.

11. (original) The method of claim 8, further comprising the step of laser welding said cast component.

12. (canceled)

13. (previously presented) The method of claim 8, wherein said cast component is provided in the shape of a gem stone mount.

14. (previously presented) The method of claim 8, wherein said cast component is provided in the shape of a ring.

15. (previously presented) The method of claim 1, further comprising the step of laser welding said braid.

16. (previously presented) The method of claim 6, wherein said forming step is performed on a mandrel.

17. (previously presented) The method of claim 6, wherein said assembling step includes the steps of:

plastically deforming said cable to create plastic deformations in said cable; and

reheating said cable after said assembling step to above the austenite phase finish temperature in order to remove said plastic deformations.

18. (previously presented) The method of claim 6, further comprising the step of heat treating said cable to impart superelastic characteristics to said cable.

19. (previously presented) The method of claim 6, further comprising the step of laser welding said cable.

20. (previously presented) The method of claim 7, wherein said forming step is performed on a mandrel.

21. (canceled)

22. (previously presented) The method of claim 7, further comprising the step of heat treating said wire to impart superelastic characteristics to said wire.

23. (previously presented) A method of manufacture of an article of jewelry comprising:
providing a wire composed of between approximately 50 to 60 wt percent Ni and between approximately 40 to 50 wt percent Ti;
forming said wire into a desired shape;
elevating the temperature of said wire above the austenite phase finish temperature to impart a memory shape to said wire;

cooling said wire to below the martensite phase finish temperature;
assembling said wire with other components to form said article of jewelry;
wherein said assembling step includes the steps of plastically deforming said wire to
create plastic deformations in said wire and reheating said wire after said assembling step to
above the austenite phase finish temperature in order to remove said plastic deformations.

24. (previously presented) The method of claim 23, wherein said forming step is performed
on a mandrel.

25. (previously presented) The method of claim 23, further comprising the step of heat
treating said wire to impart superelastic characteristics to said wire.

26. (previously presented) The method of claim 23, further comprising the step of forming
multiple said wires and intertwining said wires to form a braid.

27. (previously presented) The method of claim 23, further comprising the step of forming
multiple said wires and intertwining said wires to form a cable.

28. (previously presented) The method of claim 23, further comprising the step of laser
welding said wire.